

CLAIMS

1. A reproduction apparatus comprising:

a selecting unit operable to make a judgment on which among
5 a plurality of predetermined conditions are satisfied by each
of a plurality of audio streams, and to select an audio stream
to be reproduced among the plurality of audio streams, in accordance
with each combination of predetermined conditions satisfied by
each audio stream; and

10 a reproducing unit operable to reproduce the selected audio
stream, wherein

one of the plurality of predetermined conditions is that
a channel attribute of an audio stream is surround and a surround
output is available, and

15 if an audio frame of a target audio stream is composed of
basic data and extended data, the selecting unit judges whether
or not the predetermined condition is satisfied by detecting
whether or not a channel attribute of the extended data is surround
and the extended data is capable to be processed.

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2. The reproduction apparatus of Claim 1, further comprising:

a status register that stores a first flag group, which
corresponds to basic data of a plurality of encoding methods,
and a second flag group which corresponds to extended data of
25 the plurality of encoding methods, wherein

the first flag group is composed of a plurality of flags
that indicate, for each of the plurality of encoding methods,
whether or not the reproduction apparatus has a capability to
process the basic data,

the second flag group is composed of a plurality of flags that indicate, for each of the plurality of encoding methods, whether or not the reproduction apparatus has a capability to process the extended data, and

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not a value set in a flag, which belongs to the first flag group and corresponds to the target audio stream, is a predetermined value.

3. The reproduction apparatus of Claim 2, wherein

the capability to process the extended data is categorized into three levels referred to as a first level, a second level, and a third level, wherein at the first level, it is capable to decode the extended data and output a result of the decoding as a surround output; at the second level, it is capable to decode the extended data and output a result of the decoding as a stereo output; and at the third level, neither a surround output nor a stereo output is available, and

the predetermined value is a value indicating the first level.

4. The reproduction apparatus of Claim 1, wherein

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not either the reproduction apparatus or a device connected to the reproduction apparatus has a capability to decode the extended data.

5. The reproduction apparatus of Claim 1, wherein

the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not it is capable to transmit either the extended data that has been compressed or non-compressed digital data that has been obtained
5 by decoding the extended data, to a connected device.

6. The reproduction apparatus of Claim 1, wherein
the detection of whether or not the extended data is capable to be processed is accomplished by checking whether or not a speaker
10 of a connected device supports surround audio.

7. A program that causes a computer to execute the steps of:
making a judgment on which among a plurality of predetermined conditions are satisfied by each of a plurality of audio streams,
15 and selecting an audio stream to be reproduced among the plurality of audio streams, in accordance with each combination of predetermined conditions satisfied by each audio stream; and
reproducing the selected audio stream, wherein
one of the plurality of predetermined conditions is that
20 a channel attribute of an audio stream is surround and a surround output is available, and
if an audio frame of a target audio stream is composed of basic data and extended data, the audio stream selecting step judges whether or not the predetermined condition is satisfied
25 by detecting whether or not a channel attribute of the extended data is surround and the extended data is capable to be processed.

8. A reproduction method comprising the steps of:
making a judgment on which among a plurality of predetermined

conditions are satisfied by each of a plurality of audio streams,
and selecting an audio stream to be reproduced among the plurality
of audio streams, in accordance with each combination of
predetermined conditions satisfied by each audio stream; and

5 reproducing the selected audio stream, wherein

one of the plurality of predetermined conditions is that
a channel attribute of an audio stream is surround and a surround
output is available, and

10 if an audio frame of a target audio stream is composed of
basic data and extended data, the audio stream selecting step
judges whether or not the predetermined condition is satisfied
by detecting whether or not a channel attribute of the extended
data is surround and the extended data is capable to be processed.